DOCUMENT RESUME

ED 152 243 IR 005 634

AUTHOR Tung, Cao Thanh
TITLE Technology Is the Answer, But What Was the Question?
INSTITUTION Academy for Educational Development, Inc., Washington, D.C. Information Center on Instructional Technology.
PUB DATE Aug 74
NOTE 8p.
JOURNAL CIT Instructional Technology Report; Jul-Aug 1974

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Communication Problems; Community Action; *Community Development; *Developing Nations; *Educational Development; *Educational Planning; Educational Radio; *Educational Technology; Evaluation; Films; Instructional Technology; Mass Media; Oral History; Pilot Projects; *Rural Development; Video Tape Recordings

ABSTRACT

Cao Thanh Tung reports on a one month Seminar/Workshop on Planning for the Use of Educational Broadcast Media for National Development, which was sponsored by UNESCO and held in South Viet Nam in June 1974. The seminar placed emphasis on the importance of integrating educational media technology into programs for educational change, rather than placing emphasis on technology for its own sake. Timothy W. Kennedy reports on the use of video tape and film in the community action process in the Skyview project on the Yukon River in Alaska. Three types of locally produced films are discussed: (1) direct communication films, (2) oral history films, and (3) entertainment films. Also included in this issue are evaluation reports on the Radio School of Tarahumara and Radioprimaria; both radio schools are involved in primary education in Mexico. (Author/STS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED152243

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TECHNOLOGY IS THE ANSWER, BUT WHAT WAS THE QUESTION?

by

Cao Thanh Tung

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Academy for Educational Development
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Instructional Technology Report. July-August 1974

IR006634

INSTRUCTIONAL TECHNOLOGY REPORT

A publication of the
INFORMATION CENTER ON INSTRUCTIONAL TECHNOLOGY
Academy for Educational Development • 1414 22nd Street, N.W. • Washington, D.C. 20037 • July-August 1974

TECHNOLOGY IS THE ANSWER, BUT WHAT WAS THE QUESTION?

By CAO THANH TUNG*

Too often countries are attracted to the use of educational technology strictly on the glamour and gimmickry of the 'hardware', and little reflection is given to clear, concrete plans and the specification of goals and objectives for its use. This approach leads to difficulties once the first 'rosy glow' of excitement over the facilities and hardware subsides and the reality of integrating the technology into programs for educational change and national development confronts the user. Technology, therefore, becomes a problem, and its user must scurry in varied directions identifying questions the technology can answer. To put it in Vietnamese terms, the 'plow is placed in front of the ox, rather than behind it'. This was the thrust of a one-month Seminar/Workshop on Planning for the use of Educational Broadcast Media for National Development sponsored by UNESCO in South Viet Nam, June 1-27. Some thirty individuals participated in the Workshop representing the various educational agencies in Viet Nam and practitioners and planners involved in the use of educational broadcasting. The Instructional Materials Center of the Ministry of Culture, Education and Youth in Saigon was the site for the gathering.

The Workshop's objectives were fourfold:

- To give participants a familiarization of the factors and process which influence the effective use of communication media for education and national development.
- To provide participants with opportunities to participate in the development of a plan for solving priority educational problems affecting the national development of Viet Nam into which the use of media should be integrated.
- To give those participants lacking familiarity with basic broadcast studio procedures an orientation.

(continued on page 6)

*CAO THANH TUNG is Deputy Director of the Instructional Materials Center, Saigon, Viet Nam. He has participated in former training courses in ETV at CETO in Australia, Japan and the United States. The Instructional Materials Center is the governmental organization in charge of integrating new media into the national education development of Viet Nam. Assisted and strongly supported by USAID and OTCA, the Center is undertaking various activities for text book production, radio, television and audio visual education.

IR0056 34

VIDEOTAPING: PROCESS IN COMMUNITY DEVELOPMENT DISCUSSED BY TIM KENNEDY AT CENTER SEMINARS

Timothy W. Kennedy, Director of the Skyriver Project, was the featured guest of the Information Center on Instructional Technology for two mini-seminars where he screened films and talked about the use of video tape and film in the process of community action.

Skyriver is the name of the video tape/film project of 1971-72 on the Yukon River in Alaska. The setting is the Eskimo village of Emmonak where Kennedy had previously spent two and a half years helping organize a fishing cooperative. In search of ways to strengthen the process of community action, he met the people responsible for the Fogo Island program where the Film Board of Canada and Memorial University had developed a technique of using film and an animator to promote local change. Kennedy got some funding from the U.S. Office of Economic Opportunity to use video tape and film to test out some of the Fogo Island ideas and see whether these visual media could help the Eskomos affect change through their own efforts.

Kennedy is not trained as a film maker; his interest in Skyriver was to get Eskimos first to articulate their problems, then to agree by consensus on their most important problem and finally to act in unison to get government officials to respond. Group consensus and action had been absent in Emmonak; village factions, feuds, and the individual's sense of powerlessness in the face of government were the norm. The visual media were used, therefore, to fortify the villagers' efforts and became the tool to achieve the ends of community power and government accountability.

The key word during the ICIT seminars was PROCESS. What is done and how it is done are the main factors in this process. While the aim of most, if not all, film makers is to create a distinctive product, Kennedy's main concern is to establish a process of community development in which video taping and filming play a role. The local people control the tempo of the process as well as make the fundamental decisions on how, when and where the media will be used.

Another important aspect of the process is the matter of accountability. When a person is taped or filmed, no one else gets to see the tape or film until the individual first screens it personally and then signs a release statement. The individual has complete editing control, and has the last word as to what is cut or not.

(continued on page 3)

The May 1974 issue of *Instructional Technology Report* was devoted to reviewing a series of analytical studies done by Wilbur Schramm and staff members of the Institute for Communication Research, Stanford University, on learning, cost and field projects using media in education. Laurence Wolff prepared the review report for the Bureau for Technical Assistance, Agency for International Development. Due to limitations of space in that issue, two projects designed to extend educational opportunity in Mexico were not included and are reproduced here.

RADIO SCHOOLS OF THE TARAHUMARA, MEXICO PROVIDE VILLAGES WITH PRIMARY EDUCATION

According to *"The Radio Schools of the Tarahumara, Mexico: An Evaluation,* by Sylvia Schmelkes de Sotelo, Catholic missionaries founded the radio schools of Tarahumara in northern Mexico to provide the remote villages of the Tarahumara Indians with primary school education. In 1971 there were 46 schools with 1,081 students spead over 10 municipalities in their region. Most of the schools consisted of a single classroom containing students from grades 1 to 4.

The standard primary school curriculum is used and all instruction is in Spanish. Two teachers at the radio station teach all of the radio programs, which consist of 15 minute presentations by subject and grade. Each school which receives the broadcasts has one or two "auxiliary" teachers — persons with usually no more than a primary education.

The researchers tested and interviewed a sample of all the students in the schools. They found that over 60% of the students were *mestizo* (white) rather than Indian. They also found that, while achievement scores in general were similar to those of students in Mexico City, the *mestizo* students did significantly better than Indians and were also much less likely to drop out.

Interviews with teachers and directors showed that the program had the following problems:

- Poorly defined goals and policies.
- Provision of the same urban oriented and academic curriculum to two culturally heterogenous groups, the Tarahumara Indians and *mestizos.*
- Low motivation by the auxiliary teachers.
- Little local participation in founding and operating the schools.
- Lack of proper supervision and evaluation.
- Lack of sufficient finances to enable authorities to do middle or long-range planning.
- Insufficient time on the part of central personnel to handle the radio schools.

In only 7 of the 24 schools visited was the radio working. Thus the bulk of the teaching was being done by the auxiliary teachers, and the radio, even when used, operated as an aid to the teacher.

These findings called into question the entire scope of the radio schools.

When the researchers presented their findings, the missionaries at first began to plan for a new kind of non-formal school, which would provide Indian adolescents and adults with an awareness of their situation and their need to improve their lot, based on the concepts outlined in Paulo Freire's *Pedagogy of the Oppressed.* Then the missionaries decided to continue to teach primary school children and to develop adult education as a separate activity. They appeared to be motivated by a desire not to abandon the work of the last 15 years, even though its value had been called into question.

As of the writing of the Stanford report, the new direction of the radio schools had not been determined.

RADIOPRIMARIA: PILOT PROJECT IN MEXICO USING ONE TEACHER PLUS RADIO TO TEACH GRADES 4-6

According to *"A Report on the System of Radioprimaria in the State of San Luis Potosi,* by Peter L. Spain, the purpose of the *radioprimaria,* a pilot project of the Mexican Secretariat of Education begun in 1970, is to provide instruction in grades 4, 5 and 6 to rural schools which have had only the first three grades of primary school. The incomplete primary schools provide one teacher for grades 4 to 6 who is assisted by the radio programs. The programs are prepared regularly in Mexico City and then transported to a university-operated radio station in San Luis Potosi where they broadcast for 90 minutes a day.

The Stanford study of *Radioprimaria* utilized the following methods to evaluate the radio schools in the context of educational needs in rural areas: direct observation; achievement testing; analysis of the costs; questionnaires and interviews.

The most important finding was that the *Radioprimaria* was not fulfilling the function for which it was designed. In 1972 only about eight incomplete primary schools had established grades 4 to 6 to take advantage of the radio lessons. Another 36 complete primary schools were using radio, essentially as an adjunct to their regular teaching. In addition, only 18 of the 44 schools using radio had a functioning audible radio on the day they were visited. Since there was little or no supervision, the program personnel in Mexico City were not aware of these problems.

Another major problem was that, since 80% of the programs were prepared for all of grades 4 to 6, the students would hear most of the same programs over the three year period.

Other findings were as follows:

- Radio instruction produced achievement scores comparable to those of the children in direct teaching schools.

(continued on page 3)

(continued from page 1)

VIDEOTAPING AS PROCESS

After a person releases the tape, the community group screens it and reacts to it. Any member of the group may add to the tape already made. The talking about village problems and the taping of these discussions have the effect of consciousness raising and direct disputes and hostility away from the people themselves to the tapes. (Eventually people in Emmonak began to see common problems and feel a sense of community when before the taping this was not true.) Once the community arrives at a common problem and discusses it fully, it proposes a solution to the problem. Film is used during this part of the process because it is considered more powerful than video tape, since screening a film demands an environmental change for the viewer - a government official must leave his desk and telephone to see a film in a darkened room which is not true for video tape screening. Black and white film, instead of color film, is used because Kennedy has found that viewers can more easily get the critical information from it. Also, the use of film slows down the process at a time when it has attained a great amount of speed. The developing of films takes time and this time gives the villagers the opportunity to really think through what they have said, and be sure what they have said represents how they feel and what they want.

When the policy makers, far from the village, screen these films, they hear the articulation of a perplexing problem and are given a solution to it as well. According to Kennedy, this approach does not throw policy makers on the defensive nor do they see this complaint as just another gripe. After government officials and neighboring villagers see a film, their responses are video taped. They enjoy the same rights of accountability and editing as the Emmonak villagers. These people are not obligated to give instant replies to Emmonak film; they may take as much time as necessary to talk out their ideas before they are ready to give a reply. This process, therefore, creates a direct channel of communication, horizontally between village level people and vertically between villagers and government officials working hundreds of miles away.

Three types of film were shown at the Center seminars: a direct communication (process) film, an oral history film, and an entertainment film. The first type gives non-Eskimo people their first opportunity to see and hear village Eskimos articulate their problems. In this particular film the Eskimo chosen by the group to discuss the problem objects strongly to sending his daughter to a boarding school 5,000 miles away: "she will be gone too long at a time and will forget her Eskimo ways; she cannot help with the work at home; and she may die far from home and will not be seen again." His solution is to have regional secondary schools which will be close enough for the children to come home on the weekends. Kennedy said that when education officials saw the film, they were shocked at the information and were so moved by the presentation that a centralized boarding school plan eventually was abandoned in favor of the Eskimo solution of regional secondary schools.

The oral history films also have a dramatic effect. This time the effect is on the Eskimo communities. Their ways had been discredited with the arrival of the American culture. The oral history film has an elder who recalls witnessing a native doctor heal a woman and he tells how he himself was healed by this kind of medicine. This film serves as the catalyst for other people to recall with pride incidents of native culture that had become taboo subjects. Furthermore, the oral history film begins bridging the gap between the generations. The young people are asking, even pleading with, their elders to recall the past. According to Kennedy, this type of film has been helping to restore pride in Eskimo ways and is providing the only record of Eskimo culture that in great part will be lost with the death of this generation.

The entertainment film was filmed by children in Emmonak. The film was essentially children filming themselves at play. The villagers watch films like this one to provide a needed amount of entertainment and a more relaxed atmosphere for the screening of the other types of tapes and films.

(continued from page 2)

RADIOPRIMARIA

- The *Radioprimaria* would costs about $52.60 per student compared to $118 for traditional instruction.
- About 75% of the *Radioprimaria* teachers commuted from the city to the rural areas and did not like teaching in the rural areas. They were not very satisfied with the radio programs, but still favored their expansion.
- Parents favored schooling for their children principally as a means to move to the city and get better jobs.
- In the city of San Luis Potosi there are not enough jobs for primary and secondary school graduates.

Even though *Radioprimaria* has survived for three years, as presently constituted it will not be able to aid rural development. According to the study, rural life will improve only when there is a coordinated attack on rural social and economic problems.

Instructional Technology Report, published bimonthly, is the official newsletter of the Information Center on Instructional Technology. The Center serves as an international clearinghouse for materials and information on important developments in the use of technology for improving education around the world. The Center is operated by the Academy for Educational Development, a private non-profit organization, and is supported by the Bureau for Technical Assistance of the U.S. Agency for International Development.

The Director Reviews

SIGNIFICANT NEW DOCUMENTS ON EDUCATIONAL TECHNOLOGY

Community Media Handbook, A. C. Lynn Zelmer, The Scarecrow Press, Inc., Metuchen, New Jersey, 1973, 241 pp.

This small volume is a basic "how-to" book on media utilization with good U.S. cost figures. This handbook grew out of a series of workshops for media users whose interests ranged from the use of television to the design of simulations to the production of simple motion pictures. The solutions to media-user "how-to" problems are framed in a context of developmental use by community members with limited funds so the solutions could well apply to developing countries where technical skills and funds are in short supply. Equipment needs, program planning, script writing and production are discussed along with a good presentation on selecting among alternative media.

For additional information, Mr. Zelmer can be reached at the International Communications Institute, P.O. Box 8268, Station F, Edmonton, Alberta, Canada.

Attacking Rural Poverty, How Nonformal Education Can Help, Philip H. Coombs with Manzoor Ahmed, a Research Report for the World Bank prepared by the International Council for Educational Development, The Johns Hopkins University Press, Baltimore and London, 1974, 292 pp.

The focus of this study is on types of educational efforts outside the formal school system which seem to offer potential for helping in the monumental tasks of rural development. The study looks especially at programs designed to increase the skills and productivity of farmers, artisans, craftsmen and small businessmen.

Chapter ten: Improving the Technologies of Nonformal Education bears directly on the areas of information which are the responsibility of the Information Center on Instructional Technology. This study uses the term "educational technology" in the same context as the Center, as "all the various means and methods that can assist an educational process to accomplish desired learning results." In this area, the study led to the following basic conclusions:

- Nonformal education has an extraordinary capacity to use an almost infinite variety of educational technologies;
- Nonformal education has tended to cling to traditional, costly and inefficient means and methods;
- A major cause of economic bottlenecks to expanding nonformal education is the overreliance on face-to-face instruction of learners by teachers. Print materials plus radio can be mighty effective;
- The main emphasis in seeking to improve technologies for education in poor rural areas should be on promoting the ingenious use of effective, low cost technologies that already exist and not on introducing sophisticated new, expensive media.

Mass Media in an African Context: An Evaluation of Senegal's Pilot Project, Reports and papers on Mass Communication No. 69
UNESCO, 1974, 53 pp.

This case study of the pilot project covers the years 1965 to 1970. The basic purpose of the project was "to place modern techniques at the service of adult education, laying particular emphasis on Senegal's requirements." Television was considered a service to society on a par with education, health or public administration. However, the price of television and the uncertainty about its benefits have prevented the government from continuing and extending the pilot project.

Self-help rather than greater government assistance was the object of the television project. The main problem, however, was the gulf which separated the people from the administrators and their inability to make themselves heard or have their demands satisfied.

The training of the staff involved the mastery of the technical conditions, adaptation to the needs of the audience and exploration of problems involved in using Wolof as the language of television. The project staff was called upon to work in two languages and in two cultures. When the producer felt he was a "servant of the country" and needed to "follow its traditional patterns", the drama format seemed to emerge as the best way to present ideas and information in a realistic and useful fashion.

In addition to good programming, it was found that success of the teleclubs depended on the quality of the television reception and the capability of the group leader. And finally, the report concludes, "The effectiveness of the medium of communication depends essentially on the overall organization of services into which it is integrated and the socio-political framework in which it operates."

A General Information System for Educational Technology (ETGIS): A Conceptual Scheme, Margaret E. Chisholm, Dean, School of Library and Information Services, University of Maryland and Donald P. Ely, Director, Center for the Study of Information and Education, Syracuse University, U.S. Office of Education No. 74-401.

Even though its focus is on a system for the United States this document provides useful insights on the importance of collecting and classifying data for developing country planners who are considering educational technology as an integral part of the education process. The U.S. has a problem because its uses of educational technology cover many years of practice and include many definitions of what makes up educational technology. Developing country planners, on the other hand, have the advantage of being able to gather base line data from the beginning with their new systems and this publication offers them excellent planning guidance both in the text of the document and in the eleven critiques of the conceptual scheme which are included. The document is available for $1.00 from the U.S. Government Printing Office, 1974:546-477/2039.

Instructional Efficiency: A Means for Reducing Formal Classroom Time, Seameo Regional Center for Educational Innovation and Technology (INNOTECH), Saigon, Viet Nam, P.O. Box 3049, May, 1974, 71 pp.

INNOTECH is exploring various approaches to solve the problem of mass delivery of primary education including development of means for deriving core educational objectives so that the curriculum itself can be pared down to essentials to be learned; second, minimizing use of formal classrooms and modifying the teacher's role to one of managing the self-instruction of a large number of children with the assistance of community members, parents and peer tutors (Project IMPACT); and third, Reduced Instructional Time (Project RIT) through development of an instructional process that will increase learning rate and/or reduce formal classroom time.

This volume is a collection of papers by outstanding educators from the United States, Great Britain, Vietnam and Singapore striving to answer the question "Using current instructional objectives, how can the instructional process in primary education be made more efficient and effective without increasing costs?"

• • •

To our French readers: we urge you to acquaint yourselves with the publication *DIRECT* and, for your convenience, include a copy of their order blank, reprinted from their publication:

Getting to Sesame Street, Origins of the Children's Television Workshop, Richard M Polsky, Sponsored by the Aspen Program on Communications and Society, Praeger Special Studies in U. S. Economic, Social and Political Issues, New York, Washington, London, 1974, 139 pp.

"Sesame Street", the U. S. educational television series for three to five year olds, is quoted world wide as an example of outstanding programming and successful use of the medium for teaching children cognitive skills. The program has been adopted by many countries and adapted by many others (Plaza Sesamo, Vita Sesamo, Sesamstrasse, etc.). This important document details the preplanning efforts that went into this project of the Children's Television Workshop and highlights the need for sufficient lead time for planning, dedicated leadership, knowledgeable technicians, sensitive educators and sufficient funding to be brought together to insure success.

Polsky's book describes primarily the two years from 1966 to 1968 when the idea of a cognitively-based children's television show was examined for its feasibility, a formal proposal written, financial support secured, expert advice sought, personnel hired, and the project formally begun. By concentrating on this period the author was able to examine how decisions made early in the planning affected the show and its subsequent evaluation. The distinguishing features of this planning operation were: a small group of planners, a high degree of professionalism, clearly stated objectives, a degree of flexibility and a system of checks and balances.

pour recevoir direct

Si vous croyez que DIRECT peut intéresser certaines de vos connaissances, certains de vos amis ou collègues de travail, n'hésitez pas ! Communiquez-nous leurs noms à l'aide de ce coupon et c'est bien volontiers que nous les inscrirons sur notre liste d'envoi.

Attention toutefois, notre tirage est limité.

C'est pourquoi nous nous réservons le droit de servir en priorité les gens pour qui ce bulletin est fait : les praticiens et les techniciens de l'enseignement, les chercheurs en technologie de l'enseignement et en particulier ceux qui n'ont pas accès facilement aux sources d'information habituelles.

RENVOYER CE COUPON A L'AGENCE DE COOPERATION CULTURELLE ET TECHNIQUE, CENTRE D'INFORMATION ET D'ECHANGES TELEVISION, 39, BOULEVARD DE MAGENTA, 75010 PARIS, FRANCE.

NOM _____ **PRENOM** _____

FONCTION _____

ADRESSE (professionnelle, si possible) _____

_____

_____ **VILLE** _____

PAYS _____

CODE POSTAL _____

(continued from page 1)

TECHNOLOGY IS THE ANSWER

- To generate a series of follow-up activities which the IMC can continue throughout the upcoming year in the upgrading and in-service training of its staff and its continuing effort to integrate the use of media into the solution of Vietnamese national development problems.

The Seminar/Workshop, within a limited period of a month's time, provided the participants with a better understanding of the conditions which surround any successful broadcasting system in its attempt to serve education. These have been, unfortunately, not fully taken into serious consideration in the country of Viet Nam during its earliest days of in-school broadcasting. This situation contrasts markedly with the use of educational broadcast media in the countries of El Salvador, Mexico, Brazil, Guatemala, Singapore, Malaysia, Japan and Korea, which were presented as case studies to the participants. Particular attention was given to identifying Vietnamese educational problems and developing plans in which broadcast media and other low-cost educational technology could effectively be used as part of a solution. Major presentations were given on the process of planning, specification of objectives and research-evaluation strategies. The course content and major activities were developed by a coordinating committee of the Instructional Materials Center with the assistance of Norman McBain, the UNESCO Regional Broadcasting Adviser to Asia, and Henry Ingle, special consultant to the Seminar from the Information Center on Instructional Technology, Academy for Educational Development, Washington, D.C.

Did the Seminar achieve its objectives? What actions may be taken as follow-up after the closing of the Seminar? To get this answer, we have but to look at final projects which the participants developed toward the end of the Seminar/Workshop in which they were asked to develop detailed plans using media to help solve specific educational problems in Viet Nam.

The Seminar concluded on a positive note with the participants presenting plans and guidelines for a more effective use of Viet Nam's existing broadcast facilities, looking at successful experiences in other developing countries and at local Vietnamese conditions. The participants arrived at proposed actions they felt relevant to improving educational broadcasting. For such improvement, the participants concluded that ingredients of the following nature are needed in Viet Nam:

1. intra and interministerial cooperation and coordination at all levels within the country.
2. permanent institutionalization of personnel training in production, utilization, research and evaluation.
3. an inventory of available resources and possible outside funding assistance.
4. a thorough assessment study of Viet Nam's principal needs for national development, including those of education, health, nutrition and agriculture as well as industry.

With this in mind, the UNESCO Seminar - comprehensive in its content and diversified in its participation - conducted for the first time in a war torn member state was concluded. The hope is that this forum for discussion will be followed by action. This remains to be seen for Viet Nam is not a typical developing country. It is a country at war where resources are limited and the morale is low. But clear thinking is a pre-requisite to appropriate action, and this the Seminar/Workshop certainly has provided. The Seminar has greatly contributed to a more serious understanding of what is needed for an effective use of communication media in national development.

ICIT
THE INFORMATION CENTER ON INSTRUCTIONAL TECHNOLOGY
Academy for Educational Development
1414 22nd Street, N.W. Washington, D.C. 20037